

Serial Number: 10/064,486

allowance of the present application are respectfully requested, and are believed to be appropriate in view of the following amendments and remarks.

IN THE CROSS REFERENCE

The present application is related in subject matter to the following commonly-assigned pending applications: BALANCING GRAPHICAL SHAPE DATA FOR PARALLEL APPLICATIONS, Serial No. 09/631,764 filed August 3, 2000, now U.S. Patent No. 6,788,302, and METHOD AND APPARATUS TO MANAGE MULTI- COMPUTER SUPPLY, Serial No. 09/943,8249 filed August 31, 2001, publication No. US2003/0078955A1, on April 24, 2003.

IN THE SPECIFICATION

Please amend the specification as follows:

[p26] The physical structure of an IC can be expressed in a graphics language such as GL/1 that is recorded in a file and can involve massive amounts of data. A method and apparatus for managing this data is described in patent application Balancing Graphical Shape Data For Parallel Applications, Serial No. 09/631,764 filed August 3, 2000, now U.S. Patent 6,788,302, called Parallel Chip Enable, or PARCE shown as 30 in Figure 3. In that method the physical structure of an IC is geographically decomposed for subsequent parallel applications. PARCE is a scalable parallel program. A metric, called data density, is computed for the GL/1 data. Data density is instantiated in a matrix that summarizes the bytes required to represent physical structures on the IC. Based on this matrix, the input GL/1 file is decomposed into several

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smaller files called frames. The decomposition respects the IC hierarchy, the geographic placement of IC cells, or building blocks, as well as the balance in terms of a homogeneous network.

[p56] In order to satisfy the discretized demand, supply properties are examined and hosts are ranked in terms described below and as described in Method and Apparatus to Manage Multi-Computer Supply, Serial No. 09/943,8249 (Publication No. U.S. 2003/0078955A1), filed August 31, 2001. The assignment of hosts to satisfy sub-domain demand is a mapping of highest sub-domain demand to highest hosts, while ensuring that the resources of the host selected can accommodate the sub-domain demand. In theory, this is the equilibrium point of the supply-demand model described by the preferred embodiment of this invention. The equilibrium point is the point at which the supply cost curve and the demand cost curve intersect, thus satisfying demand in an optimal manner.

$$[p66] \quad SupplyCost(\sigma) = 1 - \int_{S_0}^S Supply(\sigma) d\sigma$$

[p67] SupplyCost ranks a computer in terms of its properties over time where Supply \mapsto Cost
(an increase in Supply implies a decrease in SupplyCost)

[p73] demand(linear) = (vector[i]/total number of grid points (nodes)); $0 \leq i \leq n-1$

[p81] demand(area) = (\sum points[j][k]/total number of grid points (nodes)); $0 \leq i \leq n-1$

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